

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-10 (canceled)

Claim 11 (currently amended): A method for custom-polarized photolithography illumination, comprising:

generating an illumination pattern comprising a quadrupole illumination pattern having a first and second set of symmetrically opposed light beams, the method further comprising rotating the polarization of at least a portion of the illumination pattern such that the first set of symmetrically opposed light beams have polarizations in the same direction and the second set of symmetrically opposed light beams have polarizations in the same direction, wherein the polarization direction of the first set of light beams is perpendicular to the polarization direction of the second set of light beams

an illumination pattern; and

varying the polarization of the light in the illumination pattern; and

transmitting the illumination ~~variably polarized light~~ through a mask pattern associated with a mask and defining photolithographic pattern features in two dimensions.

Claim 12 (canceled):

Claim 13 (currently amended): The method of Claim ~~42~~ 11, further comprising varying the polarization of a different portion of the light using a different polarization rotator.

Claim 14 (currently amended): The method of Claim ~~12~~ 11, wherein at least one polarization rotator comprises a half-wave plate.

Claim 15 (currently amended): The method of Claim ~~12~~ 11, wherein the illumination pattern comprises a dipole illumination pattern having two symmetrically opposed light beams, the method further comprising rotating the polarization of at least a portion of the illumination pattern such that the two symmetrically opposed light beams have polarizations in the same direction.

Claims 16-20 (canceled)